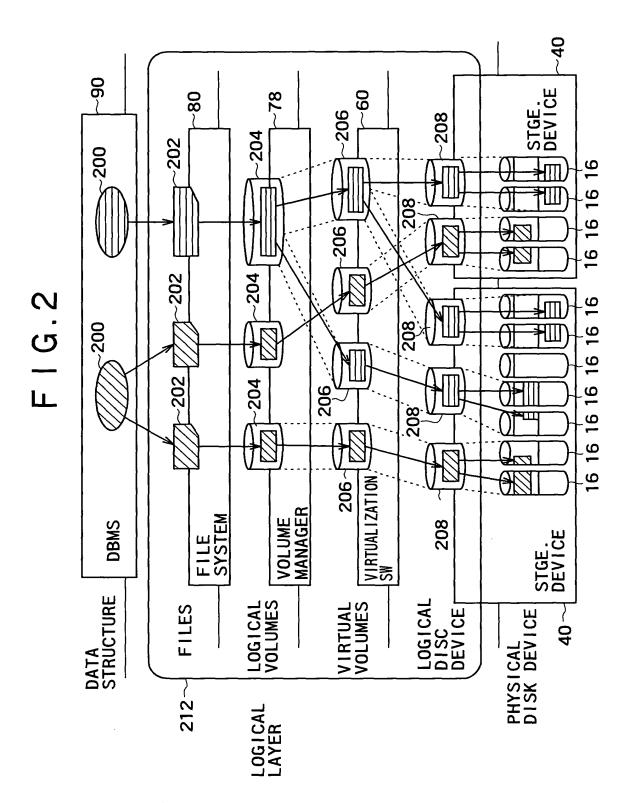
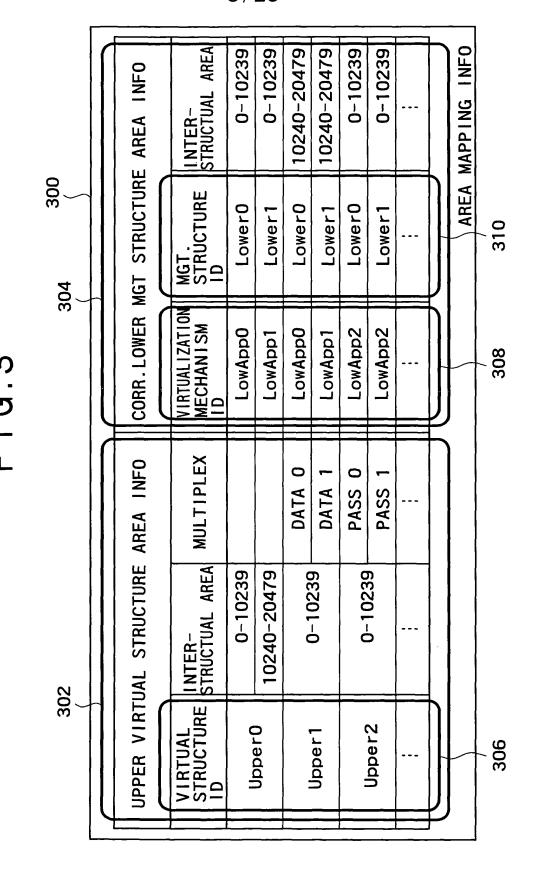


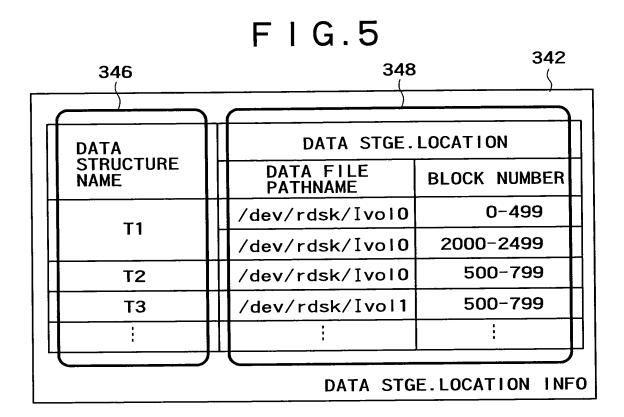
f

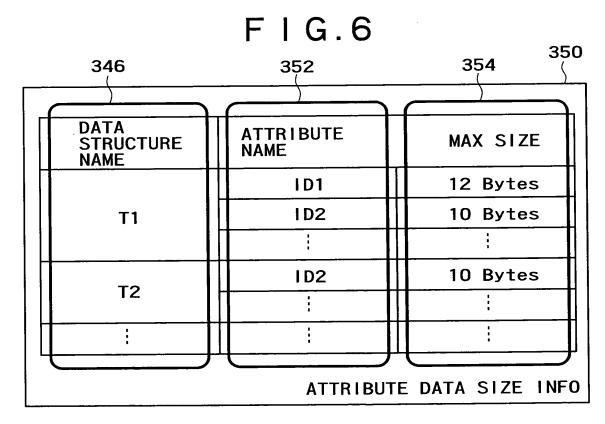




F | G.4

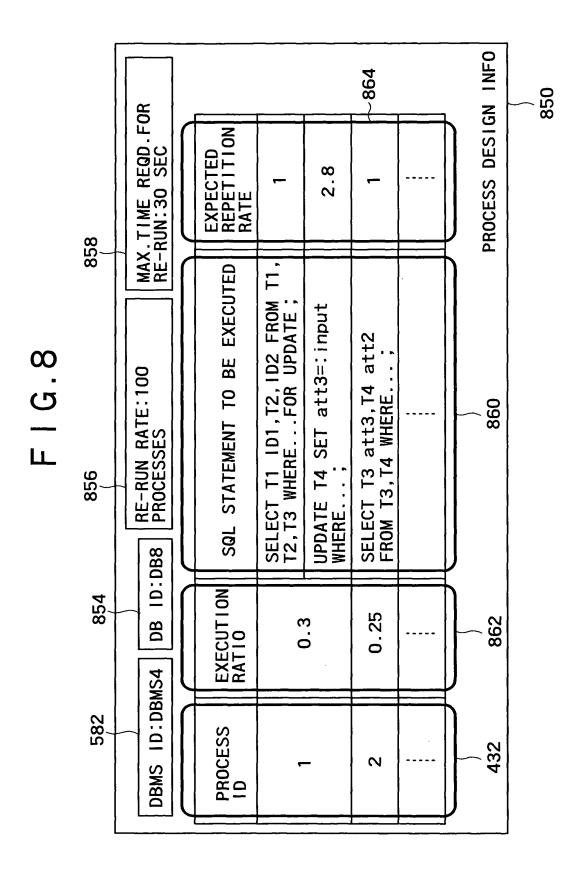
<u> </u>	462		466		364	 ~ 460
	:		:		:	CASH GROUP INFO
	CGrp1		2048MB		LU1	CASH GR
	CGrp0		1024MB		LUO, LU2, LU3,	
	CASHE GROUP ID		CASHE QUANTITY		TN ID	
Ľ		 				

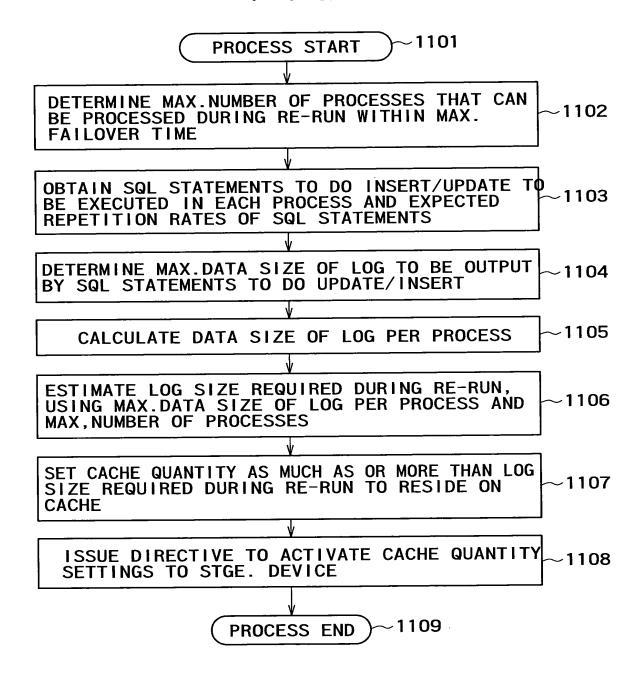


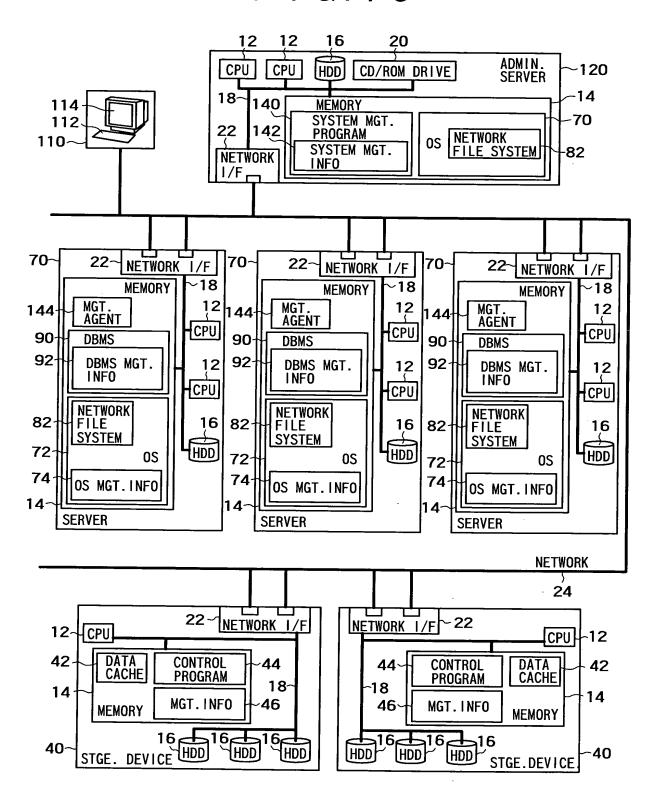


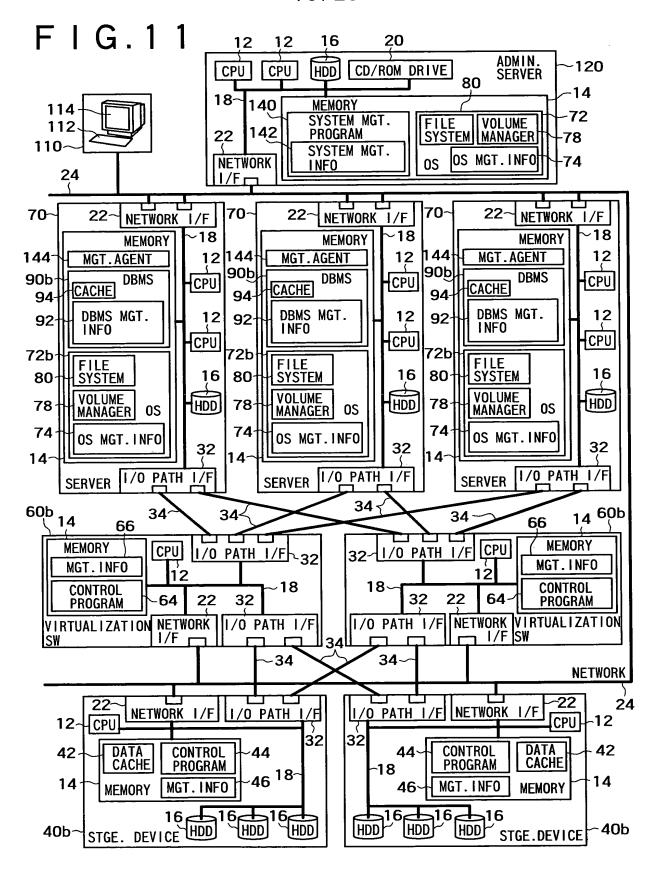
 \sim 420 ~585 **-422** ~426 DBMS INFO : DATA INTERNAL
MANAGEMENT METHOD LOG HEADER: xxx LOG HEADER: xxx INFO **DBMS2** Host2 Host1 **DBMS1** SERVER ID DBMS ID

F I G. 7

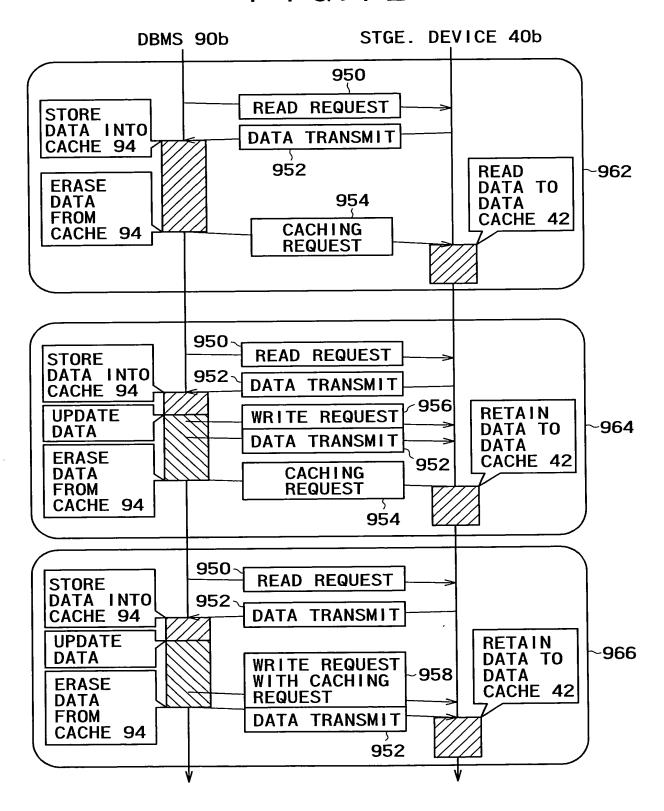








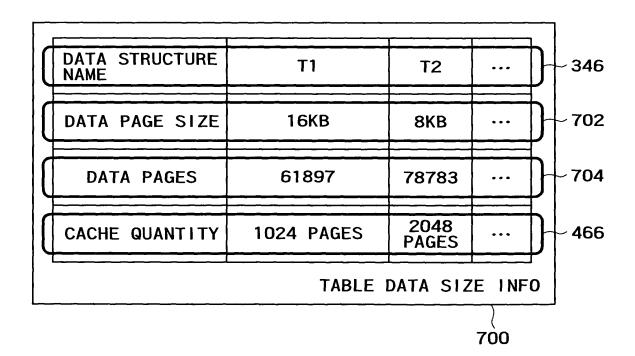
F I G. 12



F I G. 13

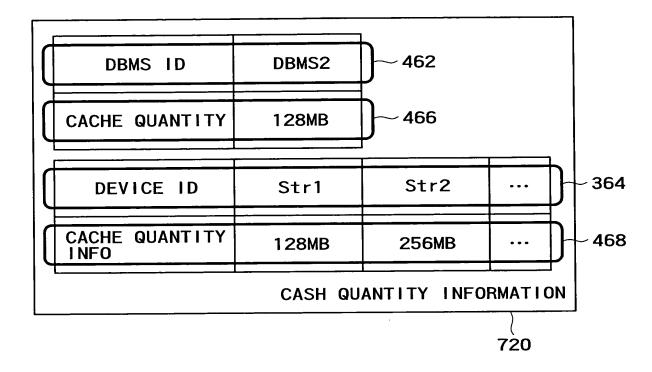
					1
CACHE GROUP ID	CGrp0	CGrp1	•••	\int	~ 462
CACHE SPACE	1024MB	2048MB	•••	$\Big\}$	466
LU ID	LU0,LU2,LU3,	LU1		}	~ 364
HINT FUNCTION	0FF	ON	•••	}	~ 468
	CA	CHE GRO	UP INF	O	
			460b		,

F I G. 14

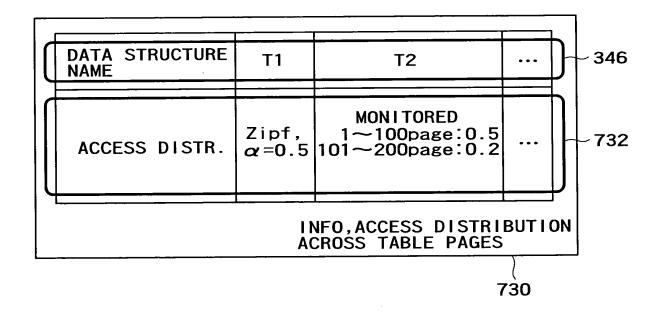


 \sim 710 ~718 -346 ~712 **∠702 466** 704 -714 716 B-Tree INDEX INFO **2400 PAGES** Ind2-1 6782 4890 8KB 102 **T**2 F I G. 15 (101, 102)**1452 PAGES** Ind1-1 3782 2898 8KB Ξ 101 5.5 EXPECTED TUPLES CORR. TABLE NAME DATA PAGE SIZE LeafNODE PAGES CACHE QUANTITY DATA STRUCTURE NAME ATTRIBUTE TO SPEACH DATA PAGES

F I G. 16



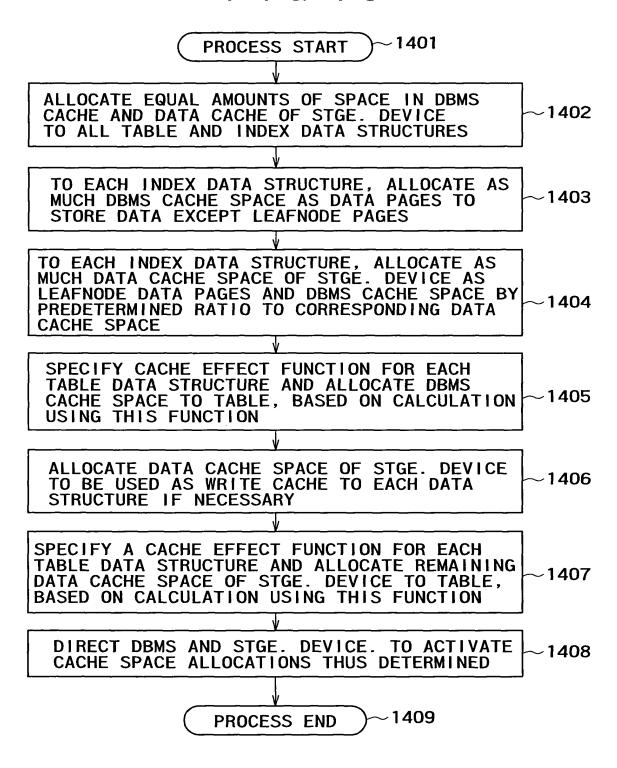
F I G. 17



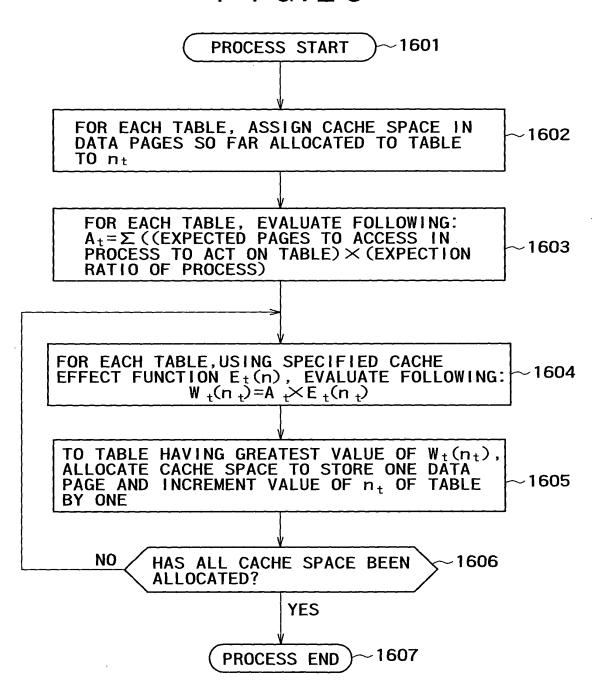
F I G. 18

432	346	784	4					
	DATA	EXPECTED DATE TO ACCESS	ATA PAGES					
PROCESS ID	STRUCTURE NAME	TOTAL	UPDATE					
	T1	9	6					
	Ind1-1	9	0					
	T2	1	1					
	i							
	Т3	4	0					
2	:	:						
	:	:						
INFO, EXPECTED DATA PAGES TO ACCESS								
			∤ 780					

780



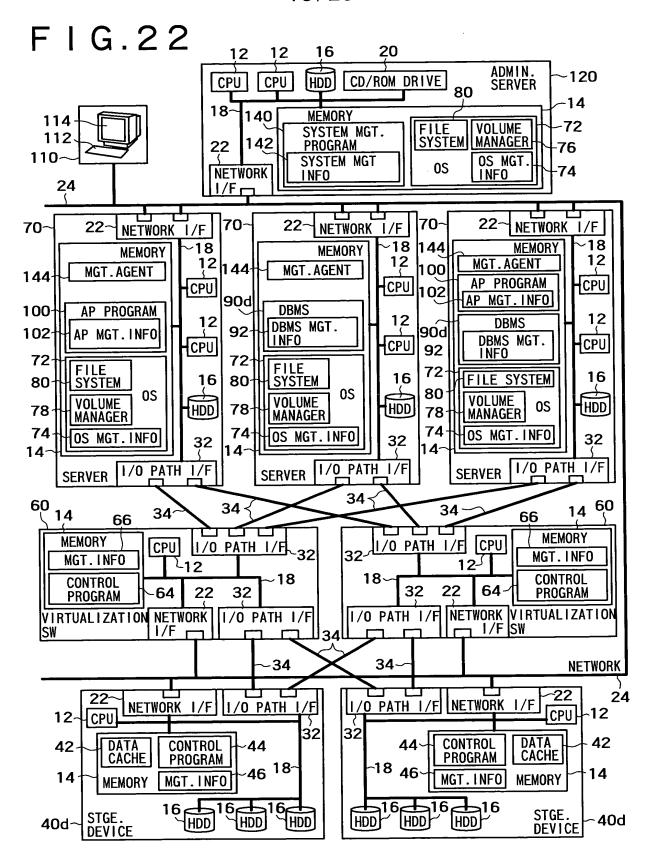
F I G.20



18/25

F I G. 21

 \sim 1401b PROCESS START ALLOCATE EQUAL AMOUNTS OF SPACE IN DBMS CACHE AND DATA CACHE OF STGE. DEVICE TO ALL TABLE AND INDEX DATA STRUCTURES TO EACH INDEX DATA STRUCTURE, ALLOCATE AS MUCH DBMS CACHE SPACE AS DATA PAGES TO -1403 STORE DATA EXCEPT LEAFNODE PAGES TO EACH INDEX DATA STRUCTURE, ALLOCATE AS MUCH DATA CACHE SPECE OF STGE. DEVICE AS LEAFNODE DATA PAGES AND DBMS CACHE SPACE -1404 BY PREDETERMINED RATIO TO CORRESPONDING DATA CACHE SPACE SPECIFY CACHE EFFECT FUNCTION FOR EACH TABLE DATA STRUCTURE AND ALLOCATE DBMS CACHE SPACE TO TABLE, BASED ON CALCULATION USING THIS FUNCTION ~1405 ALLOCATE DATA CACHE SPACE OF STGE. DEVICE. TO BE USED AS WRITE CACHE TO EACH DATA STRUCTURE IF NECESSARY ~1406 EXCUDE TABLE TO WHICH DBMS CACHE SPACE WAS ALLOCATED MORE THAN CERTAIN PROPORTION ~1421 TABLE DATA SIZE FROM OBJECTS FOR WHICH FURTHER CACHE ALLOCATION IS PERFORMED SPECIFY CACHE EFFECT FUNCTION FOR EACH TABLE DATA STRUCTURE AND ALLOCATE REMAINING DATA CACHE SPACE OF STGE. DEVICE TO TABLE, -1422 BASED ON CALCULATION USING THIS FUNCTIN (DETERMINE CACHE SPACE ALLOCATED TO TABLE IN VIEW OF DATA CACHE SPACE OF STGE. DEVICE ONLY) AS FOR DATA CACHE SPACE OF STGE. DEVICE ALLOCATED IN STEP 1422, CHECK FOR ADVERSE EFFECT OF DATA DUPLICATION AND READJUST ALLOCATIONS OF DATA CACHE SPACE OF STGE. DEVICE, CONSIDERING ADVERSE EFFECT ~1423 DIRECT DBMS AND STGE. DEVICE TO ACTICATE - 1408 CACHE SPACE ALLOCATIONS THUS DETERMINED \sim 1409 PROCESS END

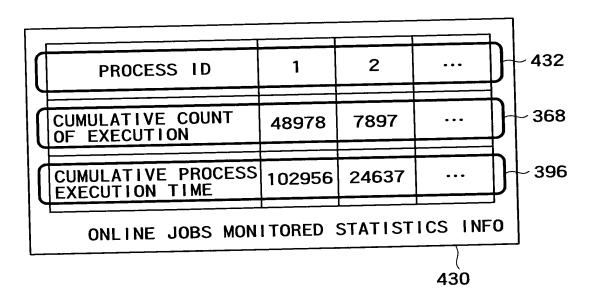


F I G.23								
<u>н</u>	364	396	368	 		370	 	362
~ 504				:	:	•	 :	CACHE MONITORED STATISTICS INFO
V:SNOI	1 Write	789	789	1	-	 ſ	STATIS	
MGT. PARTIT	TC	Read	168799	48958	342	6989	4789	NITORED
VIRTUAL MGT. SUBCACHE PARTITIONS:V	7 O	Write	78978	78978	ı	. 1	 ſ	ACHE MO
	LU LU	Read	489789	138978	0	2870	 7987	S
PARTITIONS: R	D	/PE	COUNT	TOTAL OF REAL HITS	1ST PARTI- TION	2ND PARTI- TION	 (V+R)TH PART!- TION	
REAL MGT. SUBCACHE PA	רח ום	1/0 TYPE	CUMULATIVE COU		CIMII AT I VE	CACHE HITS		
205								

F I G. 24

Γ						L		
	DBMS RESOURCE	Log Writer	Dic	Tb I 1	•••	}	412	
۱۲						L		
	CUMULATIVE COUNT OF WAIT	7809	36	0	•••]	414	
14				1		J		
DBMS MONITORED STATISTICS INFO								
					410			

F I G.25



-612 ~572 ~394 -614 HDD PERFORMANCE INFO : : HDD20, HDD21, ... Storage 0.8 1.2 17 ∞ HDDO, HDD1, . . . 0 Storage . 8 5.5 1.2 12 WRITE HIT WRITE MISS READ HIT READ MISS EUIP. 1D ACCESS PERFORMANCE INFO HDD ID

F1G.26

F I G.27

Γ-,									
	MON I T			HostO-PortO	HostO-PortO			-514	
	WHAT IS MONITORED			CUMULATIVE COUNT OF EXECUTION	CUMULATIVE DATA AMOUNT TRANSFERRED		}~	-516	
	LAST DATA		TIME	'02/12/14 13:00:00	'02/12/14 13:00:00			∤518	
	COLLEC- TION INFO	l DA	LLECTED TA MBER	7907209	50298237893				
\							$\overline{}$	ŀ	
		H D	ISTORY ATA TEM	AVG. IOPS	AVG. DATA AMOUNT TRANSFERRED (MBPS)	•••		522	
-11	\						~ 1	l	
		0	PERIOD	'02/12/1 00:00:00~ 00:05:00	'02/12/1 00:00:00~ 00:05:00				
		RECORD	AVG.	152	7.6			→ 524	
		- E	MAX.	203	10.2		J		
	HISTORY INFO	1-	PERIOD	'02/12/1 00:05:00~ 00:10:00	'02/12/1 00:05:00~ 00:10:00			520	
		RECORD	AVG.	189	9.5				
		~	MAX.	258	12.9				
							$oldsymbol{\perp}$		
MONITORING HISTORY INFO ~5									

. . .

